## FUTURE FISHERIES IMPROVEMENT PROGRAM FWP RECOMMENDATIONS TO THE FUTURE FISHERIES REVIEW PANEL SUMMER 2012

- 1. Browns Gulch (Silver Bow County) is a tributary to Silver Bow Creek located near the community of Ramsey that supports westslope cutthroat trout in the upper reaches and brook trout in the lower reaches. With the continued clean-up of Silver Bow Creek, there is potential to re-establish migratory connectivity for westslope cutthroat trout between Silver Bow Creek and Browns Gulch. This project calls for installing 5 denil-style fish ladders on existing irrigation structures located on the Ueland Ranch to enhance fish passage. Additionally, the project calls for stabilizing the channel and restoring riparian vegetation on three discrete reaches of stream. About 2,400 feet of stream channel would be treated. The work also would involve the installation of an off-channel livestock water tank, installation of 2,300 feet of riparian fencing, and the re-construction of an existing head gate. The applicant is asking for \$61,065 in Program funds and is providing \$62,300 in matching funds and \$36,435 in in-kind services toward completion of the project. We support the project as proposed (\$61,065) RIT eligible.
- 2. Cottonwood Creek (Lewis and Clark County), which flows through the Beartooth Wildlife Management Area, has been a recent focus for westslope cutthroat trout restoration. A fish migration barrier was installed in the lower reaches of the stream in 2010, and piscicide treatments have proven successful for removing non-native brook trout. Presently, the headwaters of Cottonwood Creek and the headwaters of Wegner and Frazier creeks, located on property owned by Voegele's Inc., are over-grazed by livestock and the riparian communities are degraded. This project calls for installing about 2 miles of 3-strand, high tensile fence to create a three-pasture, rest-rotation grazing system. This same grazing system has proven to be successful on a lower reach of Cottonwood Creek, which is located on the wildlife management area. The applicant is requesting \$8,448 in Program funds and is claiming \$8,000 in in-kind services. From the application, it remains unclear what these in-kind services would entail. As a result, we would like to have clarification of the matching contributions prior to making a funding recommendation (Application needs clarification of match) RIT eligible.
- 3. The Madison River (Madison County) supports a blue ribbon fishery and is one of the most heavily fished bodies of water in Montana. The river, as it flows through property owned or leased by the Granger Ranches, has been degraded in the past by livestock overgrazing and bank trampling. A previously funded project on the Granger Ranch, involving the installation of temporary electric fencing to exclude livestock from the riparian area, has proven to be successful in enhancing riparian community. This project

calls for expanding the previous fencing work to the north on pasture that has been newly leased from the Longhorn Ranch. Approximately 2 additional river miles would be protected with this project. The common occurrence of severe ice gorging prevents the use of permanent fencing in the area. As a result, the rancher and volunteers from the Madison River Foundation would remove the temporary fencing each fall and re-install it in the spring. The applicant is requesting \$5,000 in program dollars and is contributing \$2,000 in cash and \$1,200 in in-kind services. We support the project, but think Program funds should be limited to only the cost of fencing materials. The identified design, oversight and monitoring costs should be covered by in-kind services or by others. As a result, we recommend funding the project at a reduced level (\$2,177.00 for the materials as outlined in the budget table).

- 4. Miner Creek (Park County) is a tributary to Billman Creek located near Livingston that supports a slightly hybridized population of Yellowstone cutthroat trout. Presently, a portion of Miner Creek located on property owned by June Kinnick is seriously degraded by an existing, non-functional culvert and significant trampling by horses associated with an adjacent corral system. This project calls for replacing the existing non-functional culvert with a much larger bottomless arch culvert. Additionally, the project calls for fencing to ensure horses that cross the stream would be limited to using the newly installed culvert crossing. A gravity fed stock water system also would be installed to provide a replacement source of water for horses in the corral system. Adjacent riparian areas would be re-vegetated and an infiltration depression would be contoured to help capture runoff from the corral system. The applicant is requesting \$36,663 in Program dollars and is providing about \$5,000 in in-kind services. Although this project involves only about 75 linear feet of stream and is expensive on a cost per foot basis, we feel that water quality benefits would extend a significant distance downstream. As a result, we support the project as proposed (\$36,663) RIT eligible.
- 5. Pearson Creek (Powell County) is a small second order tributary to Chamberlain Creek located in the Blackfoot drainage that supports slightly hybridized populations of westslope cutthroat trout, as well as brook trout and long-nose sucker. The stream has been the site of a number of previous restoration activities, including a donated water lease for in-stream flow, 4,000 feet of channel restoration, riparian re-vegetation, and changes to improve grazing management. However, a portion of Pearson Creek, as it flows through the Heart bar Heart Ranch, continues to be impaired. This portion of the stream is straightened and the stream banks have been elevated with the placement of earthen berms. Additionally, an undersized culvert at the county road crossing acts as a partial barrier to upstream migrating fish. This project calls for reconstructing the straightened reach to mimic features of upstream and downstream references reaches. The project also proposes to replace the undersized culvert with a larger concrete box culvert that would maintain natural stream bed gravel and span the bank full channel

width. Additionally, the project calls for transplanting native shrubs and installing about 6,000 willow cuttings. A 35-foot buffer would be fenced to exclude livestock from the riparian corridor. The applicant is asking for \$36,500 in program funds and is contributing \$40,000 in cash and \$16,000 in in-kind services. Although we support the project in concept, we have significant concerns over the submitted restoration plan and would like to review final design plans as they are developed. As a result, we provisionally support the project with the requirement that we have the opportunity to review and approve design plans prior to implementation (\$36,500) RIT eligible.

- 6. Sauerkraut Creek (Lewis and Clark County), a tributary to the Blackfoot River located near the town of Lincoln, supports populations of westslope cutthroat trout, bull trout and brown trout. The westslope cutthroat trout are known to be genetically pure. Sauerkraut Creek is the site of two recent Future Fisheries projects involving the restoration of about one mile of channel that had been historically degraded by placer mining and the replacement of three undersized culverts with bridges. This project involves consolidating several points of diversion into a single point of diversion that would be retrofitted with a fish screen. Improvements to the irrigation system would eliminate entrainment of fish and secure in-stream flows with a water management agreement. The water management agreement would involve piping about 4.4 cubic feet per second (cfs) of water through a gravity fed system to irrigate fields, retiring six existing ditches and ensuring a minimum flow of 3 cfs would remain in the stream. The applicant is asking for \$11,630 in Program dollars and is contributing \$37,150 in cash and \$23,250 in inkind services. We support the project as proposed (\$11,630) RIT eligible.
- 7. Sixmile Creek (Deer Lodge County) is a stream located in the Big Hole drainage on the Mount Haggin Wildlife Management Area that historically harbored westslope cutthroat trout. Recent surveys have indicated that westslope cutthroat trout are no longer present in the stream. Only brook trout and rainbow trout were found to be present. A natural waterfall located in a bedrock canyon approximately 2 miles upstream from the mouth has the potential to be modified into a barrier to upstream fish migration. There are approximately 3 miles of excellent fish habitat upstream of this potential barrier. This project proposes to modify the waterfall by blasting away material from the bedrock cascade located just downstream to increase the jump height from about 3 feet to approximately 6 to 8 feet. Once the barrier is created, the existing brook trout population would be removed using piscicide. Following the removal of brook trout, westslope cutthroat trout would be re-introduced into this reach of stream using salvaged fish from the stream and fish obtained from other streams located in the Big Hole drainage. The applicant is requesting \$1,200 in Program funds and is contributing \$1,000 in cash towards project completion. We support the project as proposed (\$1,200) RIT eligible.

- 8. The Smith River (Meagher County), linked with the very popular Smith River State Park and floater section, supports a blue ribbon fishery for rainbow trout and brown trout. The Rocking C Ranch, owners of a substantial amount of river frontage located within the floater section, is proposing to re-establish livestock grazing on a series of hay fields adjacent to both the river and Sheep Creek. Sheep Creek is an important tributary to the Smith River. These hay fields have not been grazed in the recent past and the riparian community currently is in good condition. Once cattle are re-introduced, the riparian vegetation could readily become denuded and the stream banks trampled if the riparian corridor is not protected with fencing. This project calls for installing about 4.5 miles of electric fencing in association with six pasture/hay fields along the river and Sheep Creek. The project also calls for creating some off stream livestock water, as well as the installation of a series of livestock water gaps. The applicant is requesting \$10,000 in Program funds and is contributing \$44,964 in cash. We support the project as proposed (\$10,000).
- 9. Swamp Creek (Beaverhead County) is an important tributary for the Big Hole Arctic grayling and one of the most productive spawning tributaries in the upper Big Hole drainage. Presently, an irrigation canal from the Big Hole River intercepts Swamp Creek; diverting the stream into the canal and blocking migratory connectivity for arctic grayling and other species of fish. This project calls for installing a siphon at the canal crossing on Swamp Creek, thereby completely separating the canal water from Swamp Creek. The proposed project would improve flow in Swamp Creek downstream of the canal crossing and open upstream access for migratory fish to an additional 12 miles of stream. Additionally, a new diversion, water measuring device and fish ladder would be installed into Swamp Creek to continue to provide the water users access to their Swamp Creek water right and, at the same time, provide for upstream fish passage. The applicant is asking for \$30,000 in Program funds and is providing \$355,556 in matching funds toward completion of the project. We support the project as proposed (\$30,000).
- 10. Blackfoot River (Powell County) supports a popular blue ribbon fishery composed of mixture of salmonid species. The Blackfoot River corridor is known to be infested with noxious weeds, resulting in the loss of biological diversity among the vegetative community. This project calls for hiring a commercial weed control applicator to treat a 28.5-mile reach of the river from water's edge to the high water mark. The applicant is requesting \$11,400 in Program funds and is contributing \$11,400 in cash and \$2,280 in in-kind services. While controlling noxious weeds in the riparian corridor certainly is a desirable outcome, we feel that weed control is far outside the scope of the Future Fisheries Program, and that there are other granting programs that provide funding specifically for that purpose. Additionally, we feel that weed control, while beneficial, would have little to no direct effect on wild fish populations. As a result, we recommend that this application be denied (Deny).